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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,913	02/20/2004	Thilo Rusche	INP0005-US	5324

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EXAMINER

GEREZGIHER, YEMANE M

ART UNIT

PAPER NUMBER

2144

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/781,913

Applicant(s)

RUSCHE ET AL.

Examiner

Yemane M. Gerezgiher

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/28/2004 and 02/14/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This application has been examined. Claims 1-16 are pending.

***Information Disclosure Statement***

2. The Examiner has considered the references listed on the Information Disclosure Statement submitted on 04/28/2004 and 02/14/2005 (see attached PTO-1449).

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Allison et al. (WO 200271234 A) hereinafter referred to as Allison.

As per claims 1 and 8: Allison disclosed a method for detecting an undesirable condition (spam) within a messaging network [abstract, Page 1, Lines 12-17 and Page 7, Lines 20-30], comprising: receiving a message [Page 6,

Line 27, receiving message]; identifying a source of the message [Page 7, Lines 11-13, Lines 15-16 and Page 14, Lines 1-3, examining sending party...determining origin of the message]; if an entry in a database for the source has not been created, creating an entry in the database for the source [Page 15, Lines 6-12, Lines 26-29 and Page 19, Lines 8-14, performing lookup in the database and if failed to locate a matching node from the message an entry in the database is created for the originating node/entity], setting a source counter for the source to one, and creating a timestamp for the source [Page 15, Lines 12-14]; if an entry in the database for the source has been previously created, incrementing the source counter by one and updating the timestamp [Page 15, Lines 12-14 & Lines 30-32, Page 19, Lines 8-14, Page 19, Lines 15-19]; comparing the source counter to a source threshold; and when the source counter exceeds the source threshold over the course of a predetermined amount of time, triggering an alarm indicative of an undesirable condition [Page 14, Lines 7-8, Page 19, Line 15 through Page 20, Line 8, Page 21, Lines 10-15 and Fig. 6 # ST9-ST11].

As per claim 2: Allison further disclosed identifying a destination for the message [Page 14, Lines 9-11, receiving (destination) party is identified through plurality of identifiers]; if an entry in the database for the destination has not been created, creating a sub-entry in the database for the destination and related to the source and setting a destination counter to one [Page 15, Lines 21-32, if entry in the database is not present, creating one and incrementing

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the counter]; if an entry in the database for the destination has been previously created, incrementing the destination counter by one [Page 15, Lines 29-32, next time the message is received having the same parameters, locating previously created entry in the database and incrementing the counter]; comparing the destination counter to a destination threshold; and when the destination counter exceeds the destination threshold over the course of another period of time, triggering a destination alarm [Page 14, Lines 11-17, Page 20, Lines 12-16].

As per claim 3: Allison disclosed that the source threshold and the destination threshold comprise different values [Page 13, Table 1, attribute "Threshold" reciting different threshold levels].

As per claims 4 and 9: Allison disclosed that the message is a short message system message [Allison disclosed the message been a shot message system message throughout the entire document (e.g. Page 24, Lines 15-16, a mobile subscriber origination SMS message destined for another mobile subscriber].

As per claims 6 and 10: wherein the messaging network comprises a wireless network [Fig. 7 and Page 21, Lines 16-18, wireless network].

As per claims 7 and 11: wherein the source comprises a network user and the destination comprises an intermediary vendor [Fig. 7, source/sending MS and

receiving MS including intermediary elements including a proxy/gateway, the source been utilized by a mobile subscriber (see Page 21, Lines 16-23)].

As per claim 12: Allison disclosed a method of detecting a routing loop (undesired flooding condition in SMS messaging communication in a telecommunications network), comprising: monitoring message traffic passing through an intermediary interconnecting at least two telecommunication service providers [Fig. 8, intermediary SMS MPP receiving SMS message via SS7 or IP communication link (see also page 25, Lines 4-32, Fig. 7, source/sending MS and receiving MS including intermediary elements including a proxy/gateway, the source been utilized by a mobile subscriber (see Page 21, Lines 16-23)]; as message traffic passes through the intermediary, creating an entry in a database [Page 15, Lines 6-12, Lines 26-29 and Page 19, Lines 8-14, performing lookup in the database and if failed to locate a matching node from the message an entry in the database is created for the originating node/entity], setting a source address counter to a predetermined number and storing a timestamp corresponding to a time at which a first message passed through the intermediary [Page 13, Table 1], and incrementing the source address counter and updating the timestamp each time the first message again passes through the intermediary [Page 15, Lines 12-32, Page 19, Lines 8-14, Page 19, Lines 15-19; Fig. 7, proxy (intermediary) component, timestamp and counter functions, Fig. 8 and Page 25, Lines 4-32]; as message traffic passes through the intermediary, creating an entry in a database, setting

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a destination address counter to a predetermined number and storing a timestamp corresponding to a time at which a second message passed through the intermediary, and incrementing the destination address counter and updating the timestamp each time the second message passes through the intermediary [Page 15, Lines 21-32, if entry in the database is not present, creating one and incrementing the counter and Fig. 8, intermediary SMS MPP]; comparing the source address counter and destination address counter for a given source address and a given destination address, respectively to a source address threshold and destination address threshold; and when the source address counter and destination address counter, respectively exceed the source address threshold and destination address threshold over the course of a predetermined amount of time, triggering an alarm indicative of a routing loop [Fig. 6 # ST9-ST11, Page 14, Lines 7-8, Page 19, Line 15 through Page 20, Line 8, Page 21, Lines 10-15 and Page 20, Lines 12-16, Allison taught a sender/source counter associated with source threshold and similarly destination counter associated with a destination threshold (See Page 13, Table One) and performing a comparison function and when the SMS message transmission rate reach the predetermined threshold indicating a flooding alert and taking appropriate actions].

As per claim 13: Allison disclosed that the source address threshold and the destination address threshold comprise different values [Page 13, Table 1, attribute "Threshold" reciting different threshold levels].

As per claim 14: Allison disclosed that the message traffic comprises short message system (SMS) messages [Allison disclosed the message been a shot message system message throughout the entire document (e.g. Page 24, Lines 15-16, a mobile subscriber origination SMS message destined for another mobile subscriber].

As per claim 16: Allison disclosed that the telecommunications network comprises a wireless network [Fig. 7 and Page 21, Lines 16-18, wireless network].

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allison et al (WO 200271234 A) in view of Garcia (U.S. Patent Number 6,633,764).

Allison disclosed the invention as claimed above in claim 1. However, Allison did not teach the messaging system allowing number portability or



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detecting routing loops caused by number portability. However, examiner notes that it was known in the art that a number portability causes a routing loop (for example, see applicant's admitted prior art on page 2, ¶0004 stating "undesirable looping can often occur in the context of number portability..."). Thus, the fact that such a routing loop is caused by number portability does not further limit the invention as claimed. Furthermore, as evidenced by the teachings of Garcia, the use of number portability was commonly known in the art at the time the invention was made (see Garcia Abstract, Column 9, Lines 1-26). Thus, it is respectfully submitted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to take the teachings of Garcia (i.e. commonly known in the art of communication) and have modified the teachings of Allison, because "Number Portability allows the end user to keep his/her telephone number when moving the subscription from one network provider to another" (See Garcia, Column 1, Lines 24-26).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Allison et al. (US 7145875 B2) entitled: "Methods and systems for preventing short message service (SMS) message flooding"
- b. Allison et al. (US 6819932 B2) entitled: "Methods and systems for preventing delivery of unwanted short message service (SMS) messages"

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- c. Amir-Ebrahimi (US 6052458 A) Entitled: "Method for message marking and detection of message looping among signaling networks in a telecommunications system"
- d. Lee et al. (US 6879594 B1) entitled: "System and method for loop avoidance in multi-protocol label switching"
- e. Brocken et al. (US 5371732 A) entitled: "Method of detecting a routing loop in a telecommunication network, telecommunication network for using the method, and detection means for use in the telecommunication network"
- f. McCann et al. (US 6885872 B2) entitled: "Methods and systems for providing short message gateway functionality in a telecommunications network"

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yemane M. Gerezgiher whose telephone number is (571) 272-3927. The examiner can normally be reached on 9:00 AM - 6:00 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**YMG**

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